



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

In the Considerations of my first and second Propositions, the *Animadversor* hath rendred my Doctrine of *Un-equal Refrangibility* very imperfect and maimed, by explicating it wholly by the Splitting of rays; whereas I chiefly intended it in those Refractions that are perform'd without that suppos'd Irregularity; such as the *Experimentum Crucis* might have inform'd him of. And, in general I find, that, whil'st he hath endeavour'd to explicate my Propositions *Hypothetically*, the more material suggestions, by which I design'd to recommend them, have escap'd his consideration; such as are, The Unchangeableness of the degree of Refrangibility peculiar to any sort of rays; the strict Analogy between the degrees of Refrangibility and Colours; the Distinction between compounded and un-compounded colours; the Unchangeableness of un-compounded colours; and the Assertion, that if any one of the Prismaticque colours be wholly intercepted, that colour cannot be new produced out of the remaining Light by any further Refraction or Reflexion whatsoever. And of what strength and efficacy these Particulars are for enforcing the Theory, I desire therefore may be now consider'd.

12. Some particulars recommended to further consideration.

An Accomp of two Books.

I. *Ottonis de Guericke EXPERIMENTA NOVA MAGDEBURGIACA, de VACUO SPATIO, &c.* Amstelodami A. 1672. in fol.

After that the famous Author of this Book hath made a Narrative of the chief *Hypotheses* and Opinions of both Antient and Recent Astronomers concerning the Systeme of the world, and represented the great difficulties in the *Ptolemaique* and *Tychonique*, and repeated the Answers to the Objections against the *Copernican*; he at large gives us his own Thoughts of the Frame and Constitution of the World; By which *World* he understands in this Treatise the Complex of the Planets, dispos'd and order'd much after the *Copernican* way, the *Sun* being seated in the midst, having his Spots about him, and moving and influencing all the rest of the Planets according to their several distances from him; *Saturn* making the utmost of all the Planets, and the End of this his World being there, where the diffusive power and vertue of the *Sun*; the King and Governor of them all, terminates; which bounds he conjectures to extend themselves, beyond *Saturn*, to those Fixt Stars that are of the nearer rank to *Saturn's* Orbe.

Concerning the Bodies lodged in these Planets, he thinks it consonant to the Power and Wisdom of the Great Creator, that there should be such a variety of them, as to stock each of the said Planets,

with creatures differing from those of others: so that nothing of what is in (e. g.) our Earth or Terr-aqueous Globe, is to be found in any of the other Planets, but that every one of them is stored with peculiar creatures, and even with such reasonable ones, as are of another kind from the Men of our Earth.

As to the *Space* that is between those his Mundan Bodies (the Planets,) he conceives it to be not any thing Material or Corporeal, but a *Meer Space* void of all body, which *Space* he defines to be as 'twere the Universal Vessel containing all Bodies; declaring herein his dissent from *Des-Cartes*, in whose opinion *Space* or Extension cannot be without an extended substance: whereas he (our Author) makes *Space* indifferent to the being or not being filled with bodies.

Treating of this *Space*, which he calls *Void*, and esteems so in its own nature, he maketh it Immense and Infinite: And discussing that so much agitated Question, whether there be a *Vacuum*, he concludes it in the Affirmative, asserting, that not only all those parts of his *Space*, to which the *Effluvia* or *Expirations* of his World do not reach, are void of all body, but also, that so much of Water, Air, or any other thing as is exhausted out of vessels, no other body succeeding in its room, so much there is of Vacuity there. To prove which latter, he repeateth in this volume many of those Experiments of his, which the Learn'd *Schottus* had publish't before: adding some others, together with some improvements of his Engin; which was also described by the said *Schottus*, and in which two very considerable things were deficient, as is observ'd by Mr. *Boyle*, the Noble Author of the *New Experiments Physico-Mechanical touching the Air*, p. 6, 7. in the first English Edition, printed A. 1660. at *Oxford*, and enrich't since, by the same, with a *Continuation of New Experiments touching the Spring and Weight of the Air, and their effects*, printed A. 1669. in the same place: Which two Treatises being compar'd with what hath been heretofore publish't by the aforesaid *Schottus*, and now by this Author, it will easily appear to sagacious and impartial Readers, to which of these two Gentlemen, Mr. *Boyle* and Mons. *De Gericke*, the Curious are most obliged, there having been at first but six experiments made by the latter of them, publish't by *Schottus*, in *Arte Hydraulico pneumatica*, about A. 1656, which afterwards were called *Antiqua* by the same, in his *Technica Curiosa*, printed A. 1662; in which are also recorded the other Experiments, call'd *Experimenta Magdeburgica Nova*, two years after Mr. *Boyles* lately mention'd first Book; the *Continuation* of which hath been abroad three years before this of *de Gericke* himself, now under consideration.

Concerning our Authors Contrivance of his *Virunculus* or little Man, made to indicate the Weight of the Air at any time, and to foretell Wind and Weather; since he thinks fit to make a secret of it, we must let him enjoy it alone, till he shall think good to disclose it.

But

But touching his Experiment of a New and before never used Wind-guns, (as he calls it) whereby, contrary to the common Wind-guns, in which by store of well-compreſed Air, Bullets may be shot, he teacheth, that by evacuating and weakning the Air, the like effect may be produced; as to this, I say, the Reader will find the same Principle made uſe of by Mr. Boyle in his lately-mention'd Continuation, the fourth Experiment about a New Hydro-aero-pneumatical Fountain, made by the Spring of un-compreſſed Air.

As to the Experiment related by this Author l. 3. c. 7. of making Water fall in *vacuo*, with such a noise, as if it were a hard substance, it appears by the *Journal of the R. Society*, that ſuch an one was made before that Illuſtrious company by Mr. Boyle ſome years ago.

For a conclusion of this Accompt, I ſhall take notice of an Experiment, mention'd by our Author, l. 5. c. 15; by which he thinks may be repreſented the chief Vertues, he enumerates of our Earth, perform'd by a Globe of Sulphur melted and cooled again, and then perforated, to traject an Iron axis through it for circumvolution; whereby, attrition being uſed withal, he affirms that the Impulsive, Attractive, Expulsive, and other vertues of the Earth, as he calls them, may be ocularily exhibited. How far this Globe and its performance may be confidid in, the Tryals and Considerations of ſome Ingenious persons here may perhaps inform us hereafter.

II, *Theſaurus MEDICINÆ PRACTICÆ*; Studio & operâ Tho-
mæ Burnet Scoto-Britanni, M. D. & Medici Regis Ordinarii: Lon-
dini impensis R. Boultre apud insigne Capitis Turcæ in vico dicto
Cornhill, 1672. in 4o.

THIS Learn'd and Industrious Author, having conſidered the fe-
veral abilities of Physicians, and the different ways of their
writings reſpectively; ſome delivering Medical Institutions and
Controversies; ſome commenting upon Hippocrates and Galen; o-
thers publishing Methods of Curing Diseases and Practical Phyſicks;
others augmenting the Medical matter, and teaching the way of Pre-
paring Medicines; many improving Anatomy; and not a few re-
cording Observations and Consultations: Having, I ſay, conſidered
this variety and diversity, he preferrs the laſt way of all as appearing
to him moſt uſeful to Mankind; and therefore undertaketh in this
Work of his to give us a Treasure of Practical Phyſick, collected
from the Observations and Advices of a great number of Physical
Writers, both Ancient and Modern, ſuch as he eſteemed to be moſt
conſiderable of that profession. In the doing of which, he enume-
rates in an Alphabetical order about 410 kinds of Diseases of humane
Bodies, partly inward, partly outward; deſcribing their nature
and ſymptomes, and declar ing withal the ways of cure, as they are

to be met with in those many Authors, he affirms to have carefully consulted : Of which there are by him alledged no less than 117.

Amongst all these Chapters of *Diseases* and their Cures there are interspersed many not common Observations of Nature, such as are: *That the force of Cassoreum* is such, That about the Isles of Fero, the Fishermen, when their Boats are endangered by Whales, throw some of that substance into the Sea-water, which being beaten with it, the Fish immediately sinks to the bottom: *That Vinegar* may be preserv'd from all worms, by mixing a little Theriac therewith, and so exposing it in a close vessel to the Sun for a moneth, daily shaking it, and afterwards percolating it when settled: *That there are men, that ruminante properly speaking, like Beasts that chew the Cud, and that some of such persons when opened after death, have either their a-*
esophagus every where fleshy like a Muscle, or their stomach very rough and large; Where 'tis also observed, that one of such ruminating men, did not at all chew the cud when sick, just like Oxen and Cows, that are said by country-people to do so neither, when they are not well: *That a certain Sea-man, that had lived long at Sea, and contracted from a continual fluxion a Cough, which exercized his Lungs for two years, did at length cast out, together with blood, two considerable ramifications of veins, separate from all parenchymatous matter, shewing the corruption of the whole substance of the Lungs: That it hath been observed to be dangerous, to have a vein opened at once in both arms, or legs, which is here called a Neronian Venæ-section, &c.*

Errata to be corrected in Numb. 87.

Pag. 5067. l penult. Tractatu. p. 5058. l. 43. Demonstratis. p. 5069. l 10. non in AX. p. 5070. l. 23. particularem vel defensionem. ibid. l. 35. pro 2 PQL leg. -2 PQL. ib. lin. 29. ad margin. lege. Vide Tab. II. Fig. III. p. 5071. l. 16. est media. ibid. l. 31 pro 1 L Vc¹ leg. 1-Vc¹. p. 5072. l. 35. pro 4⁴ 10000, l. 4⁴ 10000, p. 5073. l. 18. pro quid. l, quin. p. 5074. l. 23. 27. &c. pro 5 T. l. 6 T. ibid l. 23. pro s₂, l. S2. ibid. l. 31. pro ¹₃ D³ l. ¹₃ D³ p. 5075. l. 2. pro ¹₄ LD³, ¹₄ LD² ib. l. 29. l. It. pro idem. ib. l. 39. Hyperbola sit Scalenæ.

Errata in this Numb. 88.

Pag. 5087. l. 7. r. Bodies. p. 5094. l. 34. r. it must. ip. 5097. l. 9. r: and made to divercante.

LONDON,

Printed for John Martyn, Printer to the Royal Society, 1672.